

ABSTRACT

A semiconductor device having a field effect transistor formed in a semiconductor layer provided on an insulating layer is provided with a body electrode electrically connected to a channel forming region of the field effect transistor, and a back gate electrode provided below the insulating layer so as to be opposed to the channel forming region of the field effect transistor. A potential for controlling carriers of conduction type opposite to a channel formed in an upper portion of the channel forming region of the field effect transistor is applied to each of the body electrode and the back gate electrode. Thus, the withstand voltage for the drain of the field effect transistor can be increased. It is also possible to stabilize the threshold voltage of the field effect transistor. Furthermore, the threshold voltage of the field effect transistor can be changed in a stable state.